

Public Works

Strategic Plan Presentation

- Department Introduction
- Strategic Goals relating to Public Works
- Department Issues

Public Works Organizational Chart



Administration

- 4 Employees
 - Administration
 - Budgeting/Payroll
 - GIS
 - Data Management
 - Cityworks Asset Management
 - Storm Water Billing

Operations

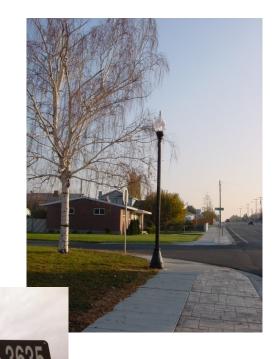
- 28 Full-time Employees
- Pavement Management
 - Slurry
 - Crack Seal & Chip Seal
 - Patching
- Storm Water
 - Street Sweeping
 - Storm Drain Cleaning
 - Piping Projects
- Sidewalk, Curb & Gutter
 - Replacement
 - Cleaning & Sealing Stamped
 - ADA Ramps





Transportation

- 4 Employees
- Repair all City street lights
- Repair/replace street signs
- Pavement Markings
- Contracted Traffic Striping
- Traffic Studies/Issues



Chester Ro

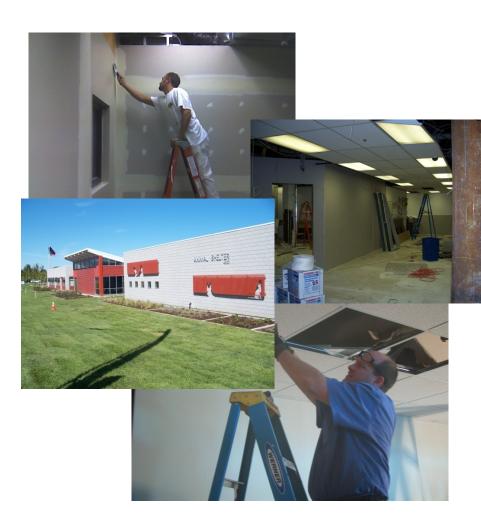
Engineering

- Administration
 - 2 Employees
- Design
 - 4 Employees
- Right-of-way/Development Review
 - 2 Employees
- Permits Excavation & Storm Water
 - 3 Employees
- Construction Project Management & Inspection
 - 3 Employees





Facilities



- Employees
 - 5 Maintenance Employees
 - 4.75 Custodial Employees
 - 1 Administrative
- Care/repairs on 19 buildings
 - City Hall
 - Public Safety Bldg
 - Fire Stations
 - Police Substations
 - UCCC
 - Hale Theatre
 - Courts
 - Vehicle Storage Unit
 - Maverik Center
 - Animal Shelter

Sanitation

- 3.5 Employees
- Receive and respond to calls for container delivery, pickup repair and replacement.
- Maintain inventory of 64,000 containers.
- Schedule Neighborhood Dumpsters.
- Oversee \$2.4 million dollar contract with Waste Management for garbage collection, recycling, bulky waste and dumpster services.





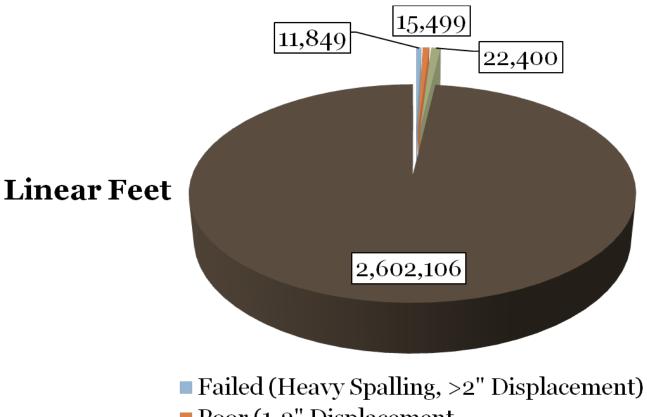
Fleet

- Employees
 - 4 Administrative and support employees
 - 7 mechanics
 - Ratio of 60 vehicles per mechanic (range 30-90)
- Equipment
 - 412 piece of equipment in Fleet
 - Police cars
 - Fire equipment
 - Construction equipment
 - Sedans
 - Pick-up trucks
 - 7 Outside Agencies



Goal #15 Improve & Provide Curb, Gutter, Sidewalk & Trail Systems

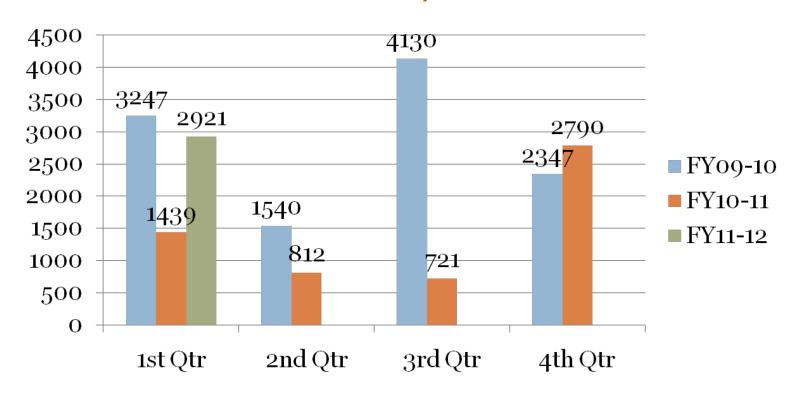
Sidewalk Condition Index Report



- Poor (1-2" Displacement
- Fair (Light Spalling; < 1" Displacement
- No Defects

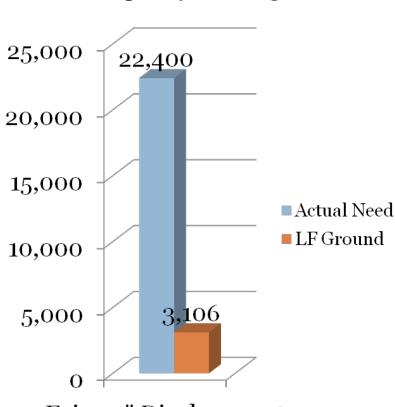
Sidewalk Repairs Action Item

FY 10-11 & FY11-12 Goals = 10,000 LF (FY10-11 Year end = 5,762 LF)



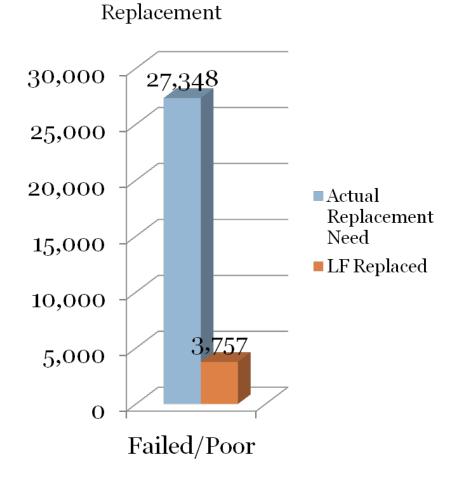
Sidewalk Repair/Replacement FY10-11





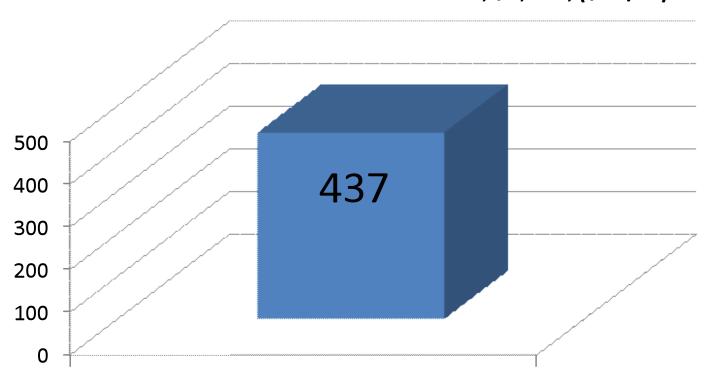
Repair by Grinding

Fair < 1" Displacement



Accelerated Concrete Repair Program

Total Paid Out to Residents for FY 10-11, \$7,429, (\$17/LF)



LF Replaced

Stamped Concrete

- FY11-12 Goal is to clean 500,000 SF
 - ¹ 153,483 SF completed in 1st Qtr FY11-12
- FY 11-12 Goal is to re-seal 175,000 SF of stamped concrete
 - 59,168 SF completed in 1st Qtr FY11-12

Current Sidewalk Projects

Projects for 2011-12	Cost	Source	Sidewalk LF
7200 W. Improvements	\$2,000,000	HB242 (State funds)	4,500
1200 W. Connection	\$3,100,000	Federal STP Funds	2,500
Malvern Avenue Sidewalk	\$150,000	CDBG	500

CITY COUNCIL ACTION ITEM

- Malvern Avenue Sidewalk Project
- \$160,000 CDBG Funds
- Contract to be awarded by June 2012



Goal #14: Find Solutions to East/West Traffic Congestion

Find Solutions to East/West Traffic Congestion

Benchmark

- Maintain all corridors with average LOS C or higher during peak hours
- For major arterials, LOS C = 22-28 mph
 - ^a 4100 S. 2700 W., State Roads
- For collector streets, LOS C = 18-24 mph
 - ^a 3100 S., 3600 W., 3200 W., etc.

Travel Speed Study Trends - Goal: Maintain average speed above 21 MPH (Shaded: average speed below goal)

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Street	Direction	Segment	Peak Hrs	Average Speed (MPH)
3100 South Eastbound		5600 West to	AM	18.6
		Bangerter Hwy	PM	23.0
		Bangerter Hwy	AM	22.4
		to Redwood Rd	PM	22.2
	Westbound	Redwood Rd to	AM	22.5
		Bangerter Hwy	PM	15.4
		Bangerter Hwy	AM	27.3
		to 5600 West	PM	23.2
4100 South	Eastbound	5600 West to	AM	25.1
		Bangerter Hwy	PM	21.9
		Bangerter Hwy	AM	25.1
		to Redwood Rd	PM	24.2
Westbound	Westbound	Redwood Rd to	AM	24.9
		Bangerter Hwy	PM	16.1
		Bangerter Hwy	AM	28.7
		to 5600 West	PM	27.1

UDOT Projects Completed

- I-215 Frontage Road (3500 3800 S)
- CFI Bangerter & 4100 South
- CFI Bangerter & 3100 South

East/West Traffic Congestion - Action Items

- 7200 W Improvements SR201 to 3500 S
 - Goal Complete by Oct 2011
 - State Funds
 - Project is complete
- 1200 W Connection Rosa Parks Dr
 - Goal Complete by June 2012
 - 93% Federal STP Funds
 - Bid is awarded

Future Projects

- Signal Coordination Study (2012) on: 3100 S, 4100 S, 4700 S
 - ^o 2012 Federal EECBG funds (\$60,000)
- 6200 S Widening Laurel Canyon to Mt. View Corridor (MVC)
 - ^o 2012 Local Funds (\$400,000)
- 6200 S Extension MVC to SR-111
 - ^o 2016 93% Federal STP Funds (\$6,500,000)

Goal #13: Reduce Speed in Neighborhoods

Diamond Summit Traffic Calming

\$100,000 for 20 speed humps 85th percentile speed (mph)

Street	Before	With Speed Display Signs	With Speed Humps	6 Months Later
High Bluff Dr	33	30	27	28
Laurel Canyon Dr	No Data	29	27	27
Wakefield Way	33	30	25	26

Neighborhood Traffic Management Program - Action Item

	Performance Measures			
City Council Action Items	1 st Qtr 10-11	2 nd Qtr 10-11	4 th Qtr 10-11	1 st Qtr 11-12
(analyze & respond to initial 6 traffic study requests)	4	5	6 on waiting list	0

Neighborhood Traffic Management

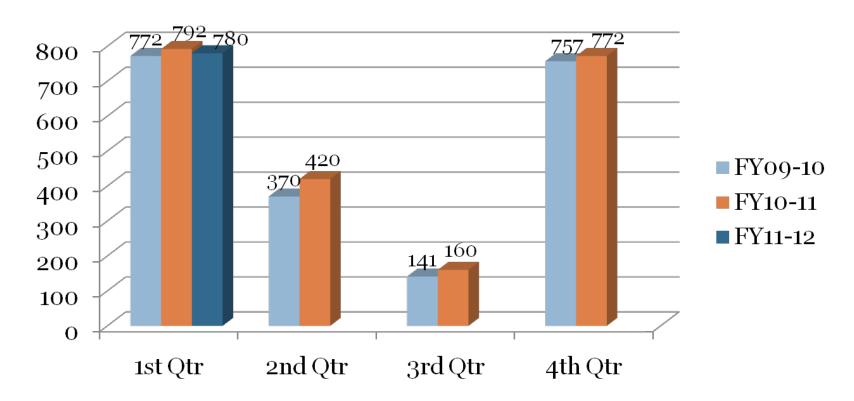
- 3800 S. 6400-7200 W. does qualify for speed humps. Speed indicator signs installed.
- Replaced old traffic islands on 6800 W. @ 3900 S. with asphalt speed humps.

Goal #5 Preserve Residential Neighborhoods

Action Item

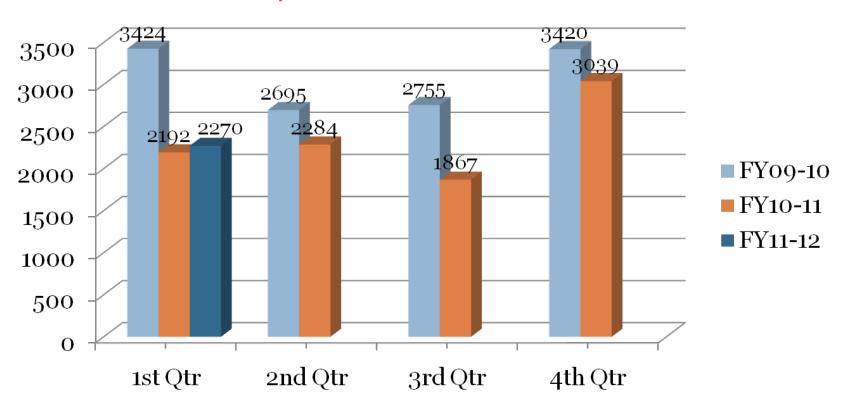
Neighborhood Dumpster Program

FY10-11 & FY11-12 Goals = 2,100 (FY10-11 Year End = 2144)



Action Item - Street Sweeping

Miles Swept FY10-11 & FY11-12Goals =12,600 mi. (FY10-11 Year end = 9,382 mi)



Department Issues

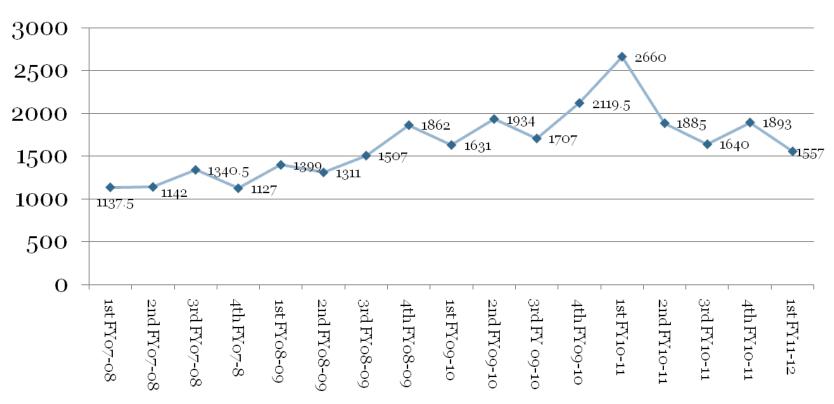
- Staffing Levels
- Infrastructure
 - Pavement Management
 - Facilities
 - Capital Improvements

Staffing Level Reduced:

- Vacant positions
 - 1.5 positions eliminated
 - 3 positions filled with 3 former temporary employees
 - 5 budgeted but unfilled
- Lots of leave used
 - PTO cash-in suspended until August 2011
 - Compensatory time & PTO had to be used

Operations Division Leave

Leave Hours



Lower Staffing Level Affected Production

- Did not reach goals on many action items
 - Focus on asphalt work/construction
 - Storm Water activities suffered most
- Will continue to focus on essential activities.
 - Some usual work activities & maintenance will be deferred.
 - More emphasis on Storm Water activities

Attention to Infrastructure



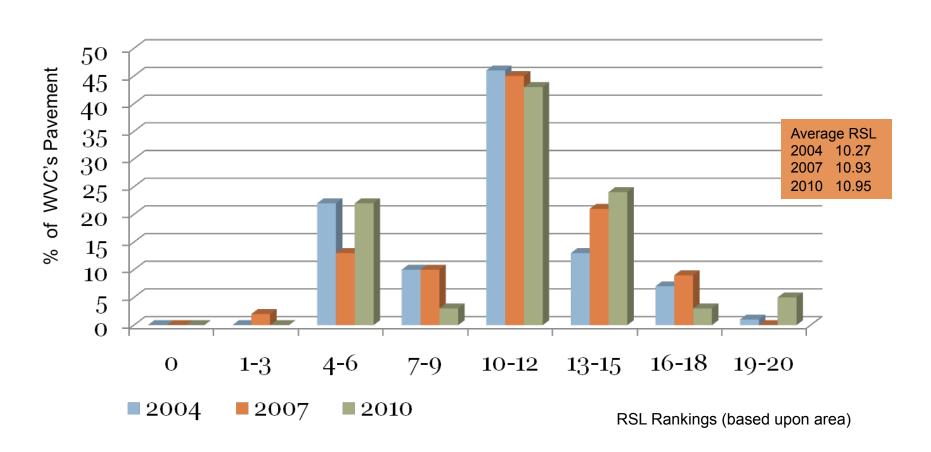
Pavement Management Benchmark

Measure Remaining Service Life (RSL)

- Average RSL of 10 years or more
- No more than 3% at end of service life

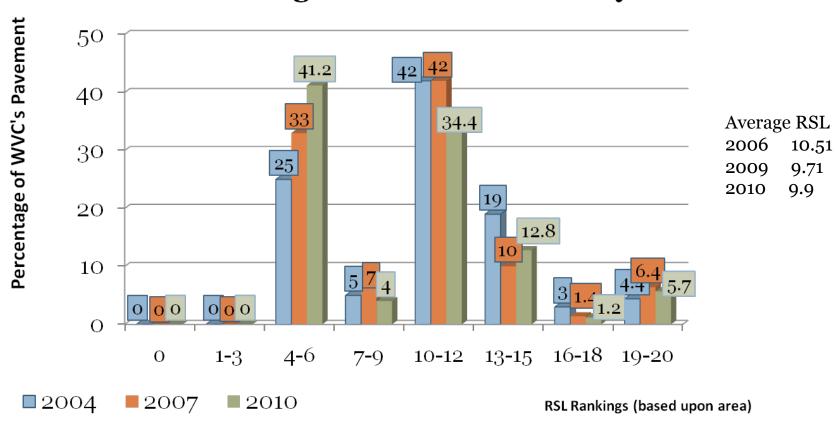
RSL Distribution for Major Streets

Percentage of Pavement Area by RSL

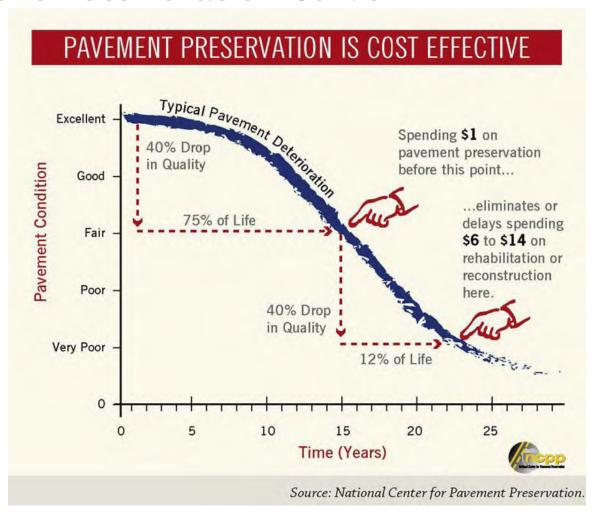


RSL Distribution for Minor Streets

Percentage of Pavement Area by RSL



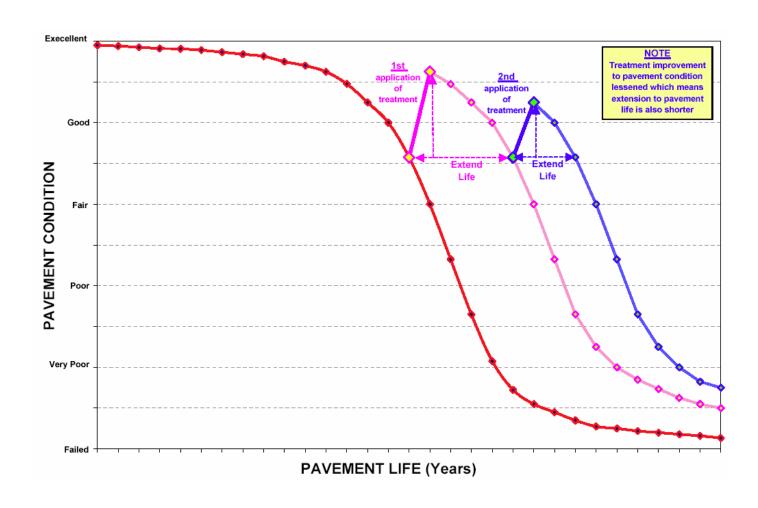
Pavement Deterioration Curve



Pavement Management

- Comprehensive Preventative Maintenance Program including:
 - Routine Maintenance Patching & Crack Seal
 - Preventative Maintenance Slurry Seal & Chip Seal
 - Rehabilitation Overlays
 - Reconstruction

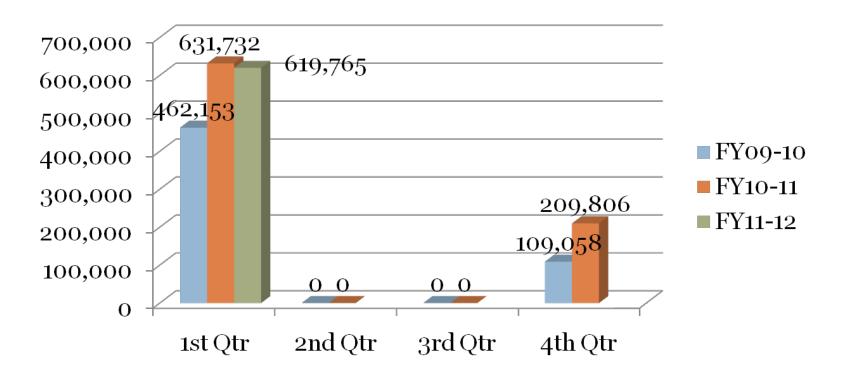
Preventative Maintenance Extends Pavement Life



Slurry Seal

FY10-11 & FY11-12 Goals (786,000 sq yds)

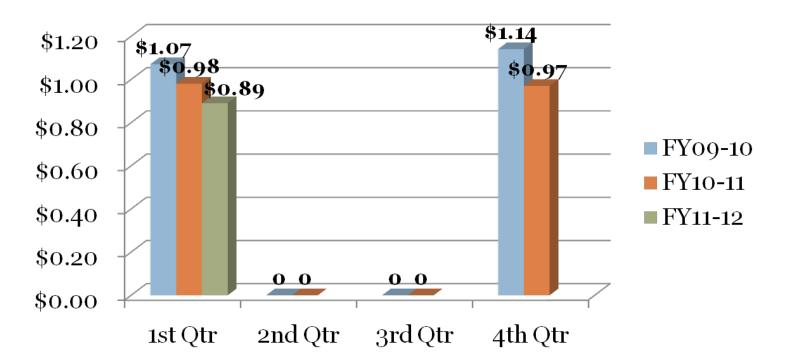
(FY10-11 Year end = 841,538 sq yds)



Slurry Seal

FY10-11 & FY11-12 Goals (\$.90 Sq Yd)

(FY10-11 Year end= \$.95)



Pavement Management Shortfall

	Current	LTAP Recommended
Major Streets	\$575,000	\$1,265,000
Minor Streets	\$1,275,000	\$2,775,000
Total	\$1,850,000	\$4,040,000

Infrastructure – No funds for major road reconstruction. Will continue to "hold it together."

2012 Pavement Management Work

- Reconstruction (\$20 per SY)
 - Cherrywood Lane 4800 W to 5300 W \$250,000
- 2" Mill and fill (\$10 per SY)

^o 4800 W – 4100 S to 4700 S	280,000
^o 3200 W – 3100 S to 3500 S	112,000
^o 6400 W – 3500 S to 4100 S	214,000

• Chip Seal (\$3.15 per SY)

□ 3100 S – 4800 W to 5600 W	109,000
^o 4800 W – 3500 S to 4100 S	91,000
° 3600 W − 4100 S to 4700 S	79,000

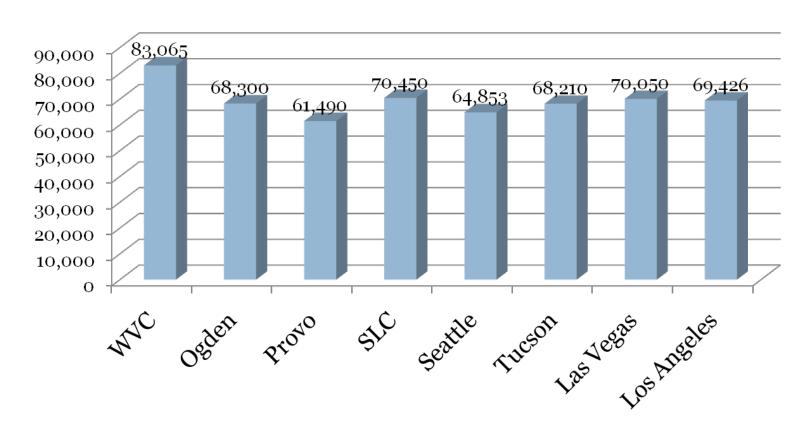
Facilities



- Maintain 19 buildings, plus oversee 4 more
- Average age of buildings is 23 years

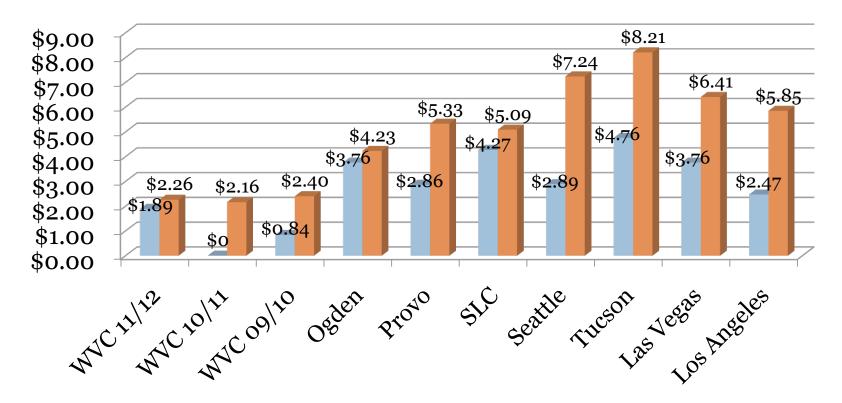
Facilities Benchmarks

Square Feet of Building Maintained per Maintenance Staff for Government Building (Source BOMA)



Facilities Benchmarks

(Source BOMA)



■ Annual Repair & Replacement Fund/SF ■ Annual Maint Expense/SF

Sustained Light Vehicle Replacement

- \$9 million value of vehicles on eligible list
- \$1.1 million per year results in 8-year rotation



Sustained Light Vehicle Replacement

- Need to replace approximately 35 vehicles per year
- No replacements budgeted in 2010-11
- 14 vehicles replaced in 2011-12

Light Vehicle Replacement

- Existing bond payments total \$1.1 million annually
 - Semi-annual payments of \$364,000 until August
 2012
 - Semi-annual payments of \$136,000 until January2014
- Commit \$1.1 million per year to light vehicle replacement
 - Approximately 35 vehicles per year

Capital Improvements

- Limited number of new street improvement or sidewalk projects coming up
 - No major UDOT projects in City
 - Class C (City's share of gas tax) is all committed to maintenance
 - Only available sources are state and federal
- Storm Water projects funded through Storm Water Utility

Summary

- No targeted funds for sidewalk construction. Making token effort on sidewalk repairs.
- East-west traffic flow has improved with new Bangerter Hwy intersection improvements
- One residential area qualifies for speed hump installation. No funding in current year.
- Staffing shortage has affected production.
- Trying to hold infrastructure together, until additional funds are available.
- New Capital Improvements are limited.